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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,184	12/01/2003	Brian K. Revill	050885-0306961	1330

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MAYER, BROWN, ROWE & MAW LLP
1909 K STREET, N.W.
WASHINGTON, DC 20006

EXAMINER

PATEL, VISHAL A

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/724,184	Applicant(s) REVILL ET AL.	
	Examiner Vishal Patel	Art Unit 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-10, 12, 14-20, 22-25, 27-31 and 34-42 is/are pending in the application.
- 4a) Of the above claim(s) 34-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-10, 12, 14-20, 22-25 and 27-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 34, 35, 36-37, 38-42 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 34-35 and 40-42 are directed to a bipolar electrolyser and to a separate embodiment as specified on page 10 of the response filed on 2/17/06. Claim 36-37 and 38-40 are directed to a combination of an anode structure and a cathode structure that is sealed by a gasket (this invention is directed to a different embodiment than the one claimed originally).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 34-42 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-10, 12, 14-20, 22-26 and 27-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. A liner of chemically resistant fluorocarbon material is not described in the specification.

Furthermore applicant argument that last paragraph on page 25 has support for a liner of chemically resistant fluorocarbon material is not persuasive because the paragraph is talking about anode structure and cathode structure not liner structure.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-4, 7-10, 12, 15-16, 18-19, 22 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Jelinek (US. 4,026,565).

Regarding claim 1: Jelinek discloses a gasket (gasket of figure 2 or 6) comprising a substantially unitary frame (frame formed by 63) having an inner peripheral edge (inner edge of 63 that has 20) and an outer peripheral edge (outer edge of 63). The inner peripheral edge being convex (convex structure of the inner edge of 63) and of continuously curved configuration over the full width of the gasket (the curved convex configuration of 63 is over the full width of the gasket) and being provided with a liner (20) of chemically resistant material conforming with the convex and continuously curved inner peripheral edge (line 20 is conforming with the convex and continuously curved inner peripheral edge). The liner is conforming to the convex inner peripheral edge and a portion of the frame in addition to the inner peripheral edge (the inner peripheral is the far inner edge of 62 and the additional coverage is a portion of 64). The liner is

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substantially U-shape (the inner surface of liner is U-shape). The frame is of plastic or metal (column 2, line 3). The liner is of a chemically resistant fluorocarbon material (elastomeric material are capable of being resistant to fluorocarbon material)

Regarding claim 3: The inner peripheral edge is part-circular in cross-section (63 having a part-circular cross-section).

Regarding claim 4: The gasket has holes to accommodate sealing bolts (as showed in figure 1, gasket in figure 6 would have mounting holes in the gasket).

Regarding claim 7: The opposite faces of the gasket are planar (planar portion of 20).

Regarding claims 8-9: A gasket (gasket of figure 6) comprising a frame (frame formed by 63) having an inner peripheral edge and an outer peripheral edge and including a protrusion or nose at the inner peripheral edge (protrusion or nose at the inner edge of 63). The protrusion or nose being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner (20) of chemically resistant material conforming with the convex and continuously curved inner peripheral edge (the liner 20 is conforming with the inner peripheral edge of the frame). The protrusion or nose extends around substantially the entire perimetral length of the frame (the protrusion or nose at the inner peripheral edge extends the entire perimeter of the frame).

Regarding claim 10: The protrusion or nose is provided on the inner peripheral edge of the frame (the protrusion being convex and continuously curved configuration is at the inner peripheral edge of the frame).

Regarding claim 12: The protrusion or nose is of curved bulbous configuration (the protrusion or nose is of bulbous configuration).

Regarding claim 15: The protrusion or nose is of a shape capable (able to) of *effecting a pinch seal when used with a second gasket (intended use) in the from of a frame having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge of the gasket being of continuously curved convex configuration and being provided with a liner of chemically resistant material conforming with the continuously curved inner peripheral edge (intended use)*. The protrusion or nose is convex through the width of the frame.

Regarding claim 16: The gasket is provided with a protrusion or nose on opposite sides thereof (the outer peripheral edge of 63 is also has a protrusion or nose).

Regarding claim 18: The frame is suitable (frame 63 is capable of being compressed) *for compression with the frame of the second gasket of similar configuration between pair of flanges (intended use), the protrusion being resilient for effecting a pinch seal with a similar protrusion on a second gasket*.

Regarding claims 19: A gasket (gasket of figure 6) effective *for compression together with a frame of a second gasket of similar configuration between a pair of flanges (intended use)*, the gasket comprising a frame (63 that forms a frame) having a resilient protrusion (protrusion formed by the inner edge of 63) on one side thereof *for effecting a pinch seal with a similar protrusion on the second gasket (intended use)*, the resilient protrusion being located at or adjacent the inner periphery of the frame (the protrusions is located at the inner periphery of the frame of the gasket) and remote from the outer periphery of the frame. The protrusion being convex and continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant material conforming with the convex and continuously curved inner peripheral edge.

Regarding claims 21: A gasket (gasket of figure 6) comprising a square or rectangular frame (rectangular frame as showed in figure 1).

As to claim 22, see figure 5.

6. Claims 1, 3, 7-10, 15, 18-19, 23-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Custer (US. 2,511,330).

Custer illustrates in figure 13, a gasket comprising a substantially unitary frame having an inner peripheral edge and an outer peripheral edge (inner edge 21a and opposite edge being the outer peripheral edge), the inner edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner (liner formed of 14 in figure 13) of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge (the liner on surfaces 21a and frame surfaces 20a). As to claim 3, the inner peripheral edge is part-circular in cross section (see figure 13). As to claim 7, the opposite faces of the gasket are planar (the surface above 20a are planar). The inner edge is curved bulbous configuration. The convex portion is capable of effecting a pinch seal (the gasket of Custer illustrates all the structural limitations as claimed) *when used with a second gasket (intended use)*. The frame is **substantially** square or rectangular with the inner peripheral edge to be convex. The liner is **substantially** uniform thickness. The frame is made from woven fabric having synthetic rubber or natural rubber material (where synthetic rubber is a plasticized resin).

With regards to claim 15, “when used with a second gasket...edge.” is considered to be intended use limitation.

With regards to claim 18, “for compression with the frame...flanges”, this limitations is considered to be intended used limitation.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer, Breaker and Foster.

Regarding claim 27: Jelinek discloses the claimed invention except for the resin to be EPDM. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the resin of Jelinek to be EPDM resin, since it has been held to be within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

9. Claims 1-2, 8-10, 12, 14, 15, 17-19, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forry (US. 6,093,467) in view of Breaker.

Forry disclose a gasket having a substantially unitary frame (frame is formed by 18 and member having surfaces 17 and 31), the frame having an inner peripheral edge that is convex and of continuously curved configuration (see figure 5) over the full width of the gasket and around the inner peripheral edge, the frame is locally enlarged (enlarged portion of the frame that passes the plane surface of the frame 54) at its inner peripheral edge to form the nose which

projects beyond the plane of the gasket on one side thereof to effect sealing contact, the gasket comprises a square or rectangular substantially unitary frame (the gasket is square or rectangular) and the cross-section of the frame is rectangular cross section (the cross-section of the frame is substantially rectangular). The frame is formed from a fiber and binder (where it is well known to have a binder that is a plasticized resin).

The limitations of claim 15 that “when used with a second gasket...inner peripheral edge”, is considered to be intended and is given little patentable weight. This reasoning applies to claim limitations of claims 18-19.

Forry discloses the invention substantially as claimed above but fails to disclose that a liner is placed on the frame that conforms to the convex surface of the frame. Breaker teaches to have a liner (526) having substantially uniform thickness is placed on an inner peripheral edge of a frame and over an additional portion of the frame (liner 526 of figure 13 that is placed over the frame). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the inner peripheral edge and a portion of the frame of Forry to be covered by a liner as taught by Breaker, to provide a seal device that is corrosion resistant (column 2, lines 65-66 and column 9, lines 15-17 of Breaker).

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Custer in view of Morris (US. 4,892,632).

Custer discloses the invention substantially as claimed above but fails to disclose that the gasket is provided with a protrusion or nose on opposite sides thereof. Morris teaches to have a gasket frame (as shown in figure 6) that has protrusion or nose on opposite sides thereof (protrusions 14). It would have been obvious to one having ordinary skill in the art at the time

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the invention was made to configure the gasket of Custer to have protrusion on opposite sides thereof to provide a gasket load (column 5, lines 10-11 of Morris).

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Forry and Breaker as applied to claim 8, and further in view of Morris (US. 4,892,632).

Forry and Breaker disclose the invention substantially as claimed above but fail to disclose that the gasket is provided with a protrusion or nose on opposite sides thereof. Morris teaches to have a gasket frame (as showed in figure 6) that has protrusion or nose on opposite sides thereof (protrusions 14). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the gasket of Forry and Breaker to have protrusion on opposite sides thereof to provide a gasket load (column 5, lines 10-11 of Morris).

12. Claims 2, 14, 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jelinek in view of Breaker (US. 5,518,257).

Jelinek discloses the invention substantially as claimed above but fails to disclose that the liner is made of polytetrafluoroethylene. Breaker discloses a gasket having a frame and a liner (226) that is formed of polytetrafluoroethylene. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the liner of Jelinek to be formed of polytetrafluoroethylene as taught by Breaker, to provide anti-corrosion (column 9, lines 15-18 of Breaker).

Response to Arguments

13. Applicant's arguments filed 2/17/06 have been fully considered but they are not persuasive.

Applicants' argument that Jelinek does disclose the liner conforming with the convex portion and a portion of the frame in addition of the inner peripheral edge is not persuasive because as seen in figure 2 that the liner is completely encapsulating the frame.

Applicants' argument that the addition of limitations that the liner is a liner of chemically resistant fluorocarbon material is not persuasive because as stated in the above rejection that the liner material of Jelinek is resistant to fluorocarbon.

Applicants' argument that the addition of limitations that the liner is a liner of chemically resistant fluorocarbon material is not persuasive because as stated in the above rejection that the liner material of Custer is resistant to fluorocarbon.

Applicants' argument that the addition of limitations that the liner is a liner of chemically resistant fluorocarbon material makes the rejection of Shaffer and Breakey in previous office action moot is not persuasive. The added limitation that the frame is rectangular or square make the rejection of Shaffer and Breakey moot.

Applicants' argument that the rejection of Forry is avoided due to the added limitations in claims 8 is not persuasive because as stated in the rejection above that Forry and Breakey reject many of the claims.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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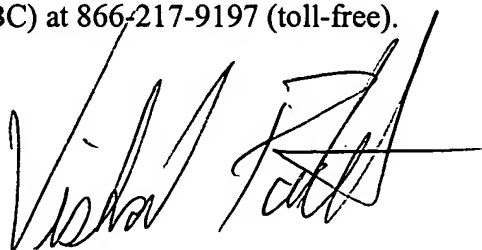
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP
May 8, 2006

A handwritten signature in black ink, appearing to read 'Vishal Patel', with a long horizontal line extending from the end of the signature.

Vishal Patel
Primary Examiner
Tech. Center 3600